

Thomas Jordan: Towards the future monetary system

Introductory remarks by Mr Thomas Jordan, Chairman of the Governing Board of the Swiss National Bank, at the event "Towards the future monetary system", Zurich, 8 April 2024.

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Ladies and Gentlemen

It is my great pleasure to welcome you to our conference. The aim of today's discussion is to map out the journey towards the future monetary system. Thank you all for taking the time to join us in this endeavour.

The financial system is undergoing rapid technological change. Central banks around the world are investigating how to harness the potential of new technologies while maintaining monetary and financial stability.

We recently launched Helvetia III, a pilot project featuring the issuance of Swiss franc digital central bank money for financial institutions. The pilot makes the SNB the first central bank worldwide to issue central bank money in tokenised form on a regulated third-party financial market infrastructure. Helvetia III could pave the way for safer and more efficient settlement, by bringing together the two essential ingredients of finance, assets and money, in tokenised form on a single platform.

In my remarks today, I will share preliminary insights from our pilot and reflect on what we have learned about the role of central banks in the future monetary system. I will argue that central bank money must maintain its essential function for the settlement of financial transactions irrespective of the technology used, and I will outline how this can be achieved in a tokenised financial ecosystem.

Central bank money and the monetary system

Let me begin with a look at our current monetary system. There are two main types of money in circulation: central bank money and commercial bank money.

Central bank money is the anchor of the monetary system. It comprises sight deposits at the central bank accessible to financial institutions, and banknotes accessible to the general public. Central bank money does not carry any credit risk. Trust in this money is based on the central bank's commitment to maintaining stable prices through sound monetary policy. Commercial banks provide their clients with money in the form of deposits. Trust in commercial bank money is based on institutional arrangements such as banking regulation, deposit insurance, and especially clients' entitlement to have their funds transferred to another bank, or to withdraw them in the form of cash.

Central bank money and commercial bank money co-exist and complement each other in the current monetary system. When businesses and individuals make electronic payments, they use commercial bank money. But such payments are ultimately settled via transfers of central bank money between commercial banks' sight deposits on the

balance sheet of a central bank. The one-to-one convertibility of commercial bank money into central bank money ensures that these two types of money are used interchangeably. One Swiss franc is one Swiss franc, irrespective of whether it is issued by the central bank or by a specific commercial bank. The value of commercial bank money is thus anchored by the value of central bank money. This ensures what is known as the 'singleness of money'.

Settlement in central bank money is facilitated by central bank payment systems. In Switzerland we use the SIC system. Last year, SIC settled a daily average of around 4 million transactions worth more than CHF 220 billion. The use of central bank money in a payment system eliminates credit risk and minimises liquidity risk, thereby contributing to financial stability.

In summary, it is essential for a central bank to maintain the role of its money as the anchor of the monetary system, irrespective of future technological innovations.

Settlement of tokenised assets and the SNB's wholesale CBDC pilot

One promising technological innovation currently gaining momentum is the tokenisation of financial assets. Tokenisation means the digital representation of assets on a distributed ledger, which is a system for recording and sharing data across a computer network. It promises a more secure, efficient and transparent financial market infrastructure for the transfer of assets in real time.

Switzerland is one of the leading centres in the adoption of tokenisation within the regulated financial system. This year so far, around 2.5% of Swiss franc bonds have been issued in tokenised format.

For the SNB, this development raises the question: How can transactions with tokenised assets be settled with central bank money? One possibility we are currently evaluating is to provide financial institutions with Swiss franc central bank money in tokenised form. This is often referred to as wholesale central bank digital currency, or wholesale CBDC. To this end, we launched the pilot project Helvetia III in December 2023. The pilot is unique: It makes tokenised central bank money available for settling commercial transactions on the same third-party platform where the tokenised assets are held. This approach aims to fully realise the benefits of tokenisation.

In the pilot, selected banks can use Swiss franc wholesale CBDC to settle tokenised bond transactions on SIX Digital Exchange, or SDX. SDX is a regulated trading and settlement platform for digital assets. Four bond issuances, from the cantons of Basel-Stadt and Zurich and from the cities of Lugano and St Gallen, were successfully settled with wholesale CBDC as part of the pilot. The SNB is also looking into how monetary policy operations, such as repos or SNB Bills, could be settled using Swiss franc wholesale CBDC.

While it is too early to draw final conclusions from the pilot, let me share some preliminary insights.

Project Helvetia III shows that wholesale CBDC does indeed provide a mechanism for maintaining the benefits of settlement in central bank money in a tokenised world.

Swiss franc wholesale CBDC can be issued on a third-party platform and used to settle tokenised assets safely and efficiently. Economically and legally, the wholesale CBDC used in Helvetia III is equivalent to sight deposits on our balance sheet. The pilot also shows that the banks, the infrastructure providers and the SNB can accommodate wholesale CBDC in their internal processes. The SNB can keep control over the issuance of its wholesale CBDC on SDX by technical means and contractual arrangements.

While these findings are encouraging, important questions remain:

- First, when should central banks start playing a role in the settlement of tokenised assets? Should we provide digital central bank money early on, or should we instead take a wait-and-see approach, and only become active if tokenisation gains in importance?
- A second question concerns whether wholesale CBDC is the best solution for settling tokenised assets in central bank money. In Switzerland, there are other possible solutions, such as linking platforms for tokenised assets with today's SIC payment system, or using private token money that is bankruptcy-protected and backed by sight deposits at the SNB. We are evaluating these options, since it is important that we understand their respective benefits and drawbacks.
- A third question addresses the design of wholesale CBDC. We would need to decide on key parameters, including whether Swiss franc digital central bank money could be held overnight, how it would be remunerated, and which financial institutions should have access. For instance, access by foreign institutions could be particularly relevant for cross-border use cases.
- Finally, issuing central bank money on a third-party platform raises questions about the criteria for a platform to qualify for the use of digital central bank money for settlement, and about the governance arrangements necessary to ensure the central bank's control. These and other questions need to be explored before we can make a decision on the introduction of Swiss franc wholesale CBDC.

Instant payments and retail CBDC

My remarks so far have focused on the role of central bank money in wholesale settlements. However, technological change also affects electronic retail payments made by individuals and businesses. As I have outlined, these retail payments are ultimately settled by transfers of central bank money between commercial banks, highlighting the critical function of central bank money as the monetary anchor.

With this in mind, the SNB has upgraded its payment system to strengthen the role of central bank money for retail payments. Last November, we launched a new version of the SIC payment system that substantially improves the way retail payments are processed. In the future, individuals and companies will be able to make payments to each other, from account to account, within seconds and around the clock. By late summer of this year, at least 50 banks, together responsible for some 98% of retail payments in Switzerland, will be able to receive and process instant payments. This also lays a foundation for competition between different payment instruments and for innovations such as programmable payments.

Some central banks are also exploring the issuance of a digital form of cash as a retail payment instrument. The SNB currently sees no need in Switzerland for such digital central bank money for the general public, also known as retail CBDC. Consumers and businesses already have access to a wide range of efficient and innovative payment instruments offered by the private sector. Retail CBDC could fundamentally alter the current monetary system and the role of central banks and commercial banks, with far-reaching consequences for the financial system. From a Swiss perspective, the risks of retail CBDC currently outweigh its potential benefits.

Conclusion

Ladies and Gentlemen, allow me to conclude: Technology is re-shaping the monetary system. I have argued that – irrespective of the technology used – central bank money must maintain its role as the anchor of the monetary system and serve as a safe settlement asset that can be used efficiently for payments between financial institutions.

In order to achieve this, central banks must make sure that central bank money and central bank payment systems reflect technological advances. Helvetia III, the SNB's pilot for Swiss franc wholesale CBDC, and the introduction of instant payments with the new version of SIC are two concrete examples.

I look forward to exploring this important subject in more depth and to hearing your perspectives in the coming panel discussion. I am delighted that we have four distinguished speakers with us today, from central banks and multilateral institutions. They have agreed to share their views on how the monetary system of the future might look.

I would like to take this opportunity to thank the panellists for coming to Zurich today.

Let me now ask Antoine Martin, Member of the Governing Board at the SNB, to introduce the panel.

Thank you.

The speaker would like to thank Philipp Haene for his support in preparing this speech. He also thanks Benjamin Müller, Alexander Perruchoud, Fabio Sonderer, Andreas Wehrli, Tanja Zehnder, as well as the SNB Language Services.